

Exhibit 2.G

EES Coke Battery LLC, A2A analysis in support of Permit Application 51-08C,
(rev. Aug. 27, 2014)

Table C-1a: EES Coke PSD Analysis

Baseline (Oct 2011-Sept 2013)																	
Fuel Use (MMBtu/yr)						Baseline Actual Emissions (tpy)											
Emission Source	COG	BFG	Lean	Rich	100% COG	Total Fuel (MMBtu)	NO _x	PM	PM ₁₀	PM _{2.5}	SO ₂	VOC	H ₂ S	TRS/RSC	H ₂ SO ₄	CO	
Battery																	
Underfire Combustion	2,547,258	348,617	395,817	795,195	1,708,443	2,899,455	857	89	204	203	1,271	112.43	5.36	6.41	147	548.28	
Pushing			5.10		5.01		6.31		6.31		17.87	0.88				39.39	
EES Flare	1,347,578	0	0	0	1,347,578	1,347,578	505	57.27	75	74	676	23.58	2.55	3.25	58.22	128.02	
Charging			0.30		0.04		0.09		0.09			0.12	8.24E-03		3.85E-05	0.06	
Door Leaks					0.33		0.67		0.67		9.13	0.81	5.55E-02		2.59E-04	0.41	
Topside Port Lid Leaks					1.44E-03		2.87E-03		2.87E-03		3.51E-03	2.39E-04		1.12E-06	1.76E-03		
Standpipe & Offtake Leaks					4.05E-03		8.10E-03		8.10E-03		9.90E-03	6.75E-04		3.15E-06	4.95E-03		
Soaking			0.20		3.05		3.05		3.05		20.15	1.22				0.41	
Bypass Bleeder Flare			18.64		2.88		3.90		3.88		44.56		0.34			16.45	
Quenching					186		18.23		11.16								
Coal/Coke Fugitives ²					31.91		9.79		1.82								
Total BAE							1,387	375	321	304	2,039	139	8.3	9.7	205	733	
PROJECTED																	
Fuel Use (MMBtu/yr)						Projected Actual Emissions (tpy)											
Emission Source	COG	BFG	Lean	Rich	100% COG	Total Fuel (MMBtu)	NO _x	PM	PM ₁₀	PM _{2.5}	SO ₂	VOC	H ₂ S	TRS/RSC	H ₂ SO ₄	CO	
Battery																	
Underfire Combustion	3,763,000	0	0	0	3,763,000	3,763,000	1,411	218	295	294	2,071	184	12.90	12.90	214	357	
Pushing			11.21		6.30		7.91		7.91		42.38	1.33				50.06	
EES Flare	1,618,715	0	0	0	1,618,715	1,618,715	607	93.89	127	126	891.5	79.32	5.55	5.55	92.27	154	
Charging			0.36		0.08		0.17		0.17			0.23	1.54E-02		7.17E-05	0.11	
Door Leaks			0.36		0.45		0.90		0.90		10.80	1.10	7.49E-02		3.50E-04	0.55	
Topside Port Lid Leaks			6.42E-03		1.28E-02		1.28E-02				1.57E-02	1.07E-03		4.99E-06	7.85E-03		
Standpipe & Offtake Leaks			1.17E-02		2.34E-02		2.34E-02				2.85E-02	1.95E-03		9.08E-06	1.43E-02		
Soaking			0.32		4.75		4.75		4.75		31.37	1.90				0.63	
Bypass Bleeder Flare			23.30		3.60		4.88		4.85		55.70		0.43			20.57	
Quenching					220.10		21.57		13.21								
Coal/Coke Fugitives ²					15.94		5.68		1.55								
BFG (from Baseline)	348,617				1.18		1.86		1.86		14.25	0.00	0.08	0.18	1.62	51.32	
Total PAE					2,055		565		470		455	3,117	268	19.0	18.6	308	635
COULD HAVE BEEN ACCOMMODATED (during baseline)																	
Fuel Use (MMBtu/yr)						Projected without Project (tpy)											
Emission Source	COG	BFG	Lean	Rich	100% COG	Total Fuel (MMBtu)	NO _x	PM	PM ₁₀	PM _{2.5}	SO ₂	VOC	H ₂ S	TRS/RSC	H ₂ SO ₄	CO	
Battery																	
Underfire Combustion	2,850,000	0	0	0	2,850,000	2,850,000		165	224	222	1,570	140	8.43	8.43	162		
Pushing			6.06		7.60		7.60		40.73		1.28						
EES Flare ¹	2,531,715	0	0	0	2,531,715	2,531,715	147	199	197	1,394	124.05	7.49	7.49		144		
Charging			0.09		0.19		0.19		0.19			0.25	1.71E-02		7.99E-05		
Door Leaks			1.06		2.12		2.12		10.38		2.59	1.77E-01		8.24E-04			
Topside Port Lid Leaks			1.19E-01		2.37E-01		2.37E-01				2.90E-01	1.98E-02		9.23E-05			
Standpipe & Offtake Leaks			1.31E-02		2.63E-02		2.63E-02				3.21E-02	2.19E-03		1.02E-05			
Soaking			4.04		4.04		4.04		26.67		1.62						
Bypass Bleeder Flare			3.60		4.88		4.85		55.70			0.43					
Quenching			212		20.73		12.69										
Coal/Coke Fugitives ²			35.93		10.95		2.04										
Total COA Emissions					575		473		454		3,097	270	16.6	15.9	307		

¹ EES Flare was capable of accommodating (COA) up to 2,587,724 MMBtu per year based on highest month (Jan 2012) of 215,644 MMBtu/month x 12 months. COA is capped off based on the typical heat input requirement to the battery during the baseline period.² Coal/Coke Fugitives includes all material handling, storage, and roadway fugitive emissions.

Total Project	NO _x	PM	PM ₁₀	PM _{2.5}	SO ₂	VOC	H ₂ S	TRS/RSC	H ₂ SO ₄	CO
Sig Level	40	25	15	10	40	40	10	10/10	7	100



Table C-1b: EES Coke Sources Emissions Factors

EMISSION FACTORS						
BASELINE			Refer to "Baseline Fuel&Emissions" for monthly breakdown of EFs as applicable			
Battery Underfire / Flare	COG	BFG	Lean	Rich	100% COG	EF Unit
NO _x					0.75	lb/MMBtu
PM			0.024	0.067	0.085	lb/MMBtu
PM ₁₀			0.042	0.157	0.111	lb/MMBtu
PM _{2.5}			0.042	0.156	0.110	lb/MMBtu
SO ₂					1.004	lb/MMBtu
CO					0.190	lb/MMBtu
VOC			0.014	0.098	0.035	lb/MMBtu
H ₂ S	varies	varies				gr/scf H ₂ S
TRS/RSC	varies	varies				gr/scf TRS
H ₂ SO ₄			0.024	0.114	0.086	lb/MMBtu
EXCLUDED			Capable of Accommodating at Battery Underfire / Flare			
CEMS			PM	0.116	lb/MMBtu	Michigan Rule 331
Stack Test 2010 w/sulfuates (DEQ derived); 2009			PM ₁₀	0.157	lb/MMBtu	Underfire stack test 2012 - Rich
Stack tests 2006 ¹ , 2012, 2009			PM _{2.5}	0.156	lb/MMBtu	Underfire stack test 2012 - Rich
Stack tests 2006 ¹ , 2012, 2009			SO ₂	1.102	lb/MMBtu	CEMS
Underfire Stack Test 2010			VOC	0.098	lb/MMBtu	Underfire stack test 2012 - Rich
Stack tests 2010, 2012, 2009			H ₂ S	2.07	gr/scf H ₂ S	Sampling analysis, H ₂ S (Aug'12)
Sampling analysis for H ₂ S			TRS/RSC	2.07	gr/scf TRS	Sampling analysis for H ₂ S (Aug. 2012) Assume TRS = H ₂ S
Sampling analyses for TRS			H ₂ SO ₄	0.114	lb/MMBtu	Underfire stack test 2012 - Rich
Stack Tests 2010, 2012, 2009						
PROJECTED			Battery Underfire / Flare			
NO _x	0.75		COG		EF Unit	Emission Factor Basis
			PM	0.116	lb/MMBtu	Michigan Rule 331
			PM ₁₀	0.157	lb/MMBtu	Underfire stack test 2012 - Rich
			PM _{2.5}	0.156	lb/MMBtu	Underfire stack test 2012 - Rich
			SO ₂	1.102	lb/MMBtu	CEMS
			CO	0.190	lb/MMBtu	Underfire Stack Test 2010
			VOC	0.098	lb/MMBtu	Underfire stack test 2012 - Rich
			H ₂ S	2.40	gr/scf H ₂ S	Sampling analysis for H ₂ S
			TRS/RSC	2.40	gr/scf TRS	Sampling analyses for TRS
			H ₂ SO ₄	0.114	lb/MMBtu	Underfire stack test 2012 - Rich

¹ 2006 stack testing includes filterable PM only. Condensable PM from AP-42 Ch. 12.2 (Table 12.2-14) is added to account for condensable portion (Lean Gas).

Table C-1c: U.S. Steel BFG Flare Emission Factors

Emission Factors			
Pollutant	BFG	EF Unit	Emission Factor Basis
NO _x	0.61	lb/MMscf	USS MAERS
PM	0.96	lb/MMscf	USS MAERS
PM ₁₀	0.96	lb/MMscf	USS MAERS
PM _{2.5}	0.96	lb/MMscf	USS MAERS
SO ₂	7.36	lb/MMscf	USS MAERS
CO	26.50	lb/MMscf	USS MAERS
VOC	0.0	lb/MMscf	USS MAERS
H ₂ S	0.0391	lb/MMscf	Sampling analyses for BFG
TRS/RSC	0.07	gr/dscf	
H ₂ SO ₄	0.07	gr/dscf	